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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,398	11/10/2003	Shutsung Liao	10634-002002 / UCHI 751 C	4394
26161	7590	07/19/2005	EXAMINER	
FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			BADIO, BARBARA P	
			ART UNIT	PAPER NUMBER
			1617	

DATE MAILED: 07/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/705,398

Applicant(s)

LIAO ET AL.

Examiner

Barbara P. Badio, Ph.D.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18, 20-23, 29, 31-34, 65 and 66 is/are pending in the application.
- 4a) Of the above claim(s) 23, 32 and 33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 18, 21, 22, 29, 31 and 65 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/7/05 & 5/31/05</u> . | 6) <input type="checkbox"/> Other: ____ |

nc

Final Office Action on the Merits

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Status of the Application

2. Claims 18, 20-23, 29, 31-34, 65 and 66 are pending in the present specification. Claims 23, 32 and 33 stand withdrawn from further consideration as being drawn to a nonelected species.

Claim Rejections - 35 USC § 112

3. The rejection of claims 34 and 66 under 35 USC 112, second paragraph is withdrawn.

Claim Rejections - 35 USC § 102

4. The rejection of claims 19 and 28 under 35 USC 102(b) over Kihira et al. is made moot by the cancellation of the instant claims.
5. The rejection of claims 18, 20-22, 29, 31, 32 and 65 under 35 USC 102(b) over Kihira et al. is withdrawn.

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6. The rejection of claims 19 and 28 under 35 USC 102(b) over Huang et al. is made moot by the cancellation of the instant claims.

7. The rejection of claims 18, 20-22, 29, 31, 32 and 65 under 35 USC 102(b) over Huang et al. is withdrawn.

8. Claims 18, 21, 22, 29, 31 and 65 are rejected under 35 U.S.C. 102(b) as being anticipated by Riccio et al.

Riccio et al. teach sulfated steroids such as 5β -cholestane $3\alpha,4\alpha,11\beta,12\beta$,21-pentol-3,21-disulfate and 5α -cholestane- $3\alpha,21$ -diol (see the entire article, especially Abstract and page 6044, compounds 1 and 4). The compounds and compositions taught by the reference are encompassed by the instant claims.

9. Claims 18, 21, 22, 29, 31 and 65 are rejected under 35 U.S.C. 102(b) as being anticipated by McKee et al.

McKee et al. teach sulfated sterols such as 5β -cholestane- $3\alpha,4\alpha,11\beta,12\beta,21$ -pentol-3,21-disulfate and stigmastane- $3\beta,5\alpha,6\beta,8\beta,15\alpha,16\beta,29$ -hepto, 29-sulfate and their antiviral activity (see the entire article, especially page 795, compounds 13, 15-18 and 21). The compounds and compositions taught by the reference are encompassed by the instant claims.

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Claim Rejections - 35 USC § 103

10. Claims 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over McKee et al.

McKee et al. teach sulfated sterols such as 5β -cholestane- $3\alpha,4\alpha,11\beta,12\beta,21$ -pentol-3,21-disulfate and stigmastane- $3\beta,5\alpha,6\beta,8\beta,15\alpha,16\beta,29$ -hepto, 29-sulfate and their antiviral activity (see the entire article, especially page 795, compounds 13, 15-18 and 21).

The instant claim differ from the reference by reciting a isomer, i.e., $3\alpha,6\alpha$ -isomer, of stigmastane-- $3\beta,5\alpha,6\beta,8\beta,15\alpha,16\beta,29$ -hepto, 29-sulfate. However, a compound that is isomeric with the prior art compound is unpatentable unless it possesses some unobvious or unexpected beneficial property not possessed by the prior art compound. *In re Norris*, 179 F.2d 970, 84 USPQ 458 (CCPA 1970).

Claim Objections

11. Claims 34 and 66 are objected to as being dependent upon a rejected base claim.

Note: The instant claims are allowable to the extent they read on the elected species.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Telephone Inquiry

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara P. Badio, Ph.D. whose telephone number is 571-272-0609. The examiner can normally be reached on M-F from 6:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Barbara P. Badjo, Ph.D.
Primary Examiner
Art Unit 1617

BB
July 18, 2005